

What is claimed is:

1. An isolated polynucleotide comprising a polynucleotide sequence selected from the group consisting of:
 - 5 (a) a polynucleotide having at least a 95% identity to a polynucleotide encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:4;
 - (b) a polynucleotide encoding a polypeptide comprising an amino acid sequence which is at least 95% identical to the amino acid sequence of SEQ ID NO:4; and
 - 10 (c) a polynucleotide which is complementary to the polynucleotide(s) of (a) or (b).
2. The polynucleotide according to Claim 1 wherein the polynucleotide is DNA.
- 15 3. The polynucleotide according to Claim 1 wherein the polynucleotide is RNA.
4. An isolated polynucleotide comprising the nucleic acid sequence set forth in SEQ ID NO:3.
- 20 5. The polynucleotide according to Claim 4 comprising nucleotide 11792 to 13562 set forth in SEQ ID NO:3.
- 25 6. An isolated polynucleotide which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:4.
7. A vector comprising the polynucleotide according to Claim 1.
- 30 8. A host cell comprising the vector according to Claim 7.
9. A process for producing a polypeptide, which process comprises: expressing from the host cell according to Claim 8 a polypeptide or a fragment encoded by the polynucleotide sequence comprising SEQ ID NO:3 under conditions sufficient for
35 the production of said polypeptide or fragment.
10. A polypeptide comprising an amino acid sequence which is at least 95% identical to the amino acid sequence according to SEQ ID NO:4.

11. A polypeptide comprising an amino acid sequence as set forth in SEQ
ID NO:4.

12. An antibody against the polypeptide according to Claim 10.

13. An antagonist which inhibits the activity or expression of the
polypeptide according to Claim 10.

14. A method for identifying compounds which inhibit or which activate an
the polypeptide according to Claim 10, which method comprises:

a) contacting a composition comprising the polypeptide with a candidate
compound to be screened under conditions to permit interaction between the compound
and the polypeptide; and

b) determining whether the compound interacts with, and activates, or inhibits
the activity of the polypeptide.

15. The method according to Claim 14, wherein the interaction in the contacting
step of (a) is associated with a second component capable of providing a detectable
signal in response to the interaction of the polypeptide with the compound and wherein
the determining step of (b) detects the presence or absence of a signal generated from the
interaction of the compound with the polypeptide.

16. A method for inducing an immunological response in a mammal which
method comprises inoculating the mammal with the HCV NS5B polypeptide of Claim
10, or a fragment or variant thereof, in an effective amount sufficient to produce an
antibody and/or T cell immune response in said mammal.

17. A method of inducing immunological response in a mammal in need
thereof, which method comprises delivering a nucleic acid vector, wherein said vector
directs expression of the HCV NS5B polypeptide according to Claim 10 or which vector
expresses a fragment or a variant of the HCV NS5B polypeptide *in vivo* in order to
induce an immunological response sufficient to produce an antibody and/ or T cell
immune response in said mammal.

18. A method of protecting a mammal from a disease caused by viruses of
the *Flaviviridae* family, which method comprises administering to said mammal a

therapeutically effective amount of an antibody produced against the polypeptide of Claim 10.

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